To: Diamond, Jane[Diamond.Jane@epa.gov]; Kemmerer,

John[KEMMERER.JOHN@EPA.GOV]; Woo, Nancy[Woo.Nancy@epa.gov]; Hashimoto,

Janet[Hashimoto.Janet@epa.gov]

From: Vendlinski, Tim

Sent: Thur 1/8/2015 5:42:45 PM

Subject: FYI: Delta smelt abundance index lowest on record (and salvage numbers at the

pumps may exceed take limit)

From: Hagler, Tom

Sent: Thursday, January 08, 2015 8:52 AM

To: Foresman, Erin; Vendlinski, Tim; Cabrera-Stagno, Valentina; Skophammer, Stephanie

Cc: Ziegler, Sam

Subject: RE: Delta smelt salvage high & abundance index lowest on record

Thanks Erin. Not great news.

I think it may be useful to have a focused discussion of this whole process at some point. Maybe as a post mortem when the water year is over, or before.

I'm unclear about how we, EPA, would explain this process of ignoring the existing WQS and deferring to an ad hoc committee. That is, how does that fit within the scheme of the CWA.

From: Foresman, Erin

Sent: Thursday, January 08, 2015 8:36 AM

To: Vendlinski, Tim; Hagler, Tom; Cabrera-Stagno, Valentina; Skophammer, Stephanie

Cc: Ziegler, Sam

Subject: Delta smelt salvage high & abundance index lowest on record

Just a heads up that discussion on Tuesday's WOMT and Smelt Working Group notes from Monday identified that salvage of adult delta smelt at the pumps may exceed the WY 2015 ITP take limit (78) within the next few weeks and the FMWT index for delta smelt is 9, the lowest on record.

Tim, this discussion may or may not be relevant to Friday's call with State Board. It is generally relevant to protection of aquatic life and drought operations and decision making. It might be helpful to ask SB for an update from the RTDOT process and decision making that is occurring with real time operations and protection of aquatic life.

<u>Smelt Working Group advice from January 29, 2014</u> does not appear to have been followed closely.

SWG Advice from Jan 29, 2014

"The SWG agreed that the conditions for and potential benefit from, implementing Action 1 have passed, and is now following guidance in the BiOp for Action 2. Therefore, The SWG agreed to recommend that project exports should result in OMRs no more negative than -5000 cfs on a 14- day running

average with a simultaneous 5-day running average no more negative than -6250 cfs. The SWG stated that OMR flows more negative than -5000 cfs would not be protective."

OMR 14-day average index from Jan 3 and 5 are slightly more negative than -5000 cfs (see table below from attached DOSS notes).

| | 5-day average | 14-day average* |
|---------------------------|---------------|-----------------|
| Index | -4,995 | -5,260 |
| OMR as of January 3, 2015 | (cfs) | |
| | 5-day average | 14-day average* |
| USGS | -4,910 | -4,440 |
| Index | -5,320 | -5,140 |

^{*}During early January, the 14-day averages include days in December, when Action IV.2.3 (OMR management) was not yet in effect. The first 14-day average of OMR that can be used to assess compliance with the OMR limit per Action IV.2.3 will be available January 15, based on the based on the 14-day average of OMR indices from January 1 through January 14.

OMR management per RPA Action IV.2.3 is currently controlling exports. Current OMR limit is - 5,000 cfs.

D-1641 Delta outflow requirement for January is 6,000 cfs (measured as a monthly average) rather than 4,500 cfs, because the December 8-River Index exceeded 800 TAF.

I bulleted my notes from WOMT.

- It was disclosed at SWG that the FMWT abundance indexes have been completed. DFW has not released the FMWT indexes yet but stated at SWG that the DS FMWT abundance index is 9, the lowest on record.
- Smelt working group (SWG) stated that as long as current conditions remain (turbidity and OMR), salvage will continue and the projects will likely exceed the WY15 ITP take limit (78) by the end of the week.
- Smelt working group concluded that there is value to reducing pumping.
- Salvage salvage monitoring is supposed to run for two hours. Due to the increased amount of material in the water from storms, sampling went down to ten minute intervals on a few of the days in early January. During those ten minute sampling periods, three adult smelt were salvaged at the pumps (this is multiplied by 12 to account for the shorter sampling period and a cumulative salvage formula) bringing the cumulative seasonal total to 36. A few days of sampling consumed ~50% of the take limit which is 78 for this water year.
- Early warning survey data Jan 1st 10 DS collected at Prisoners Point; Jan 2nd 7 DS collected Jersey Point; Jan 4th 15 DS collected at Jersey Point 15, Jan 5th one DS at Prisoner's point. These numbers suggest DS is within the entrainment window of the pumping facilities and can be drawn into the poor DS habitat of the southern Delta.

<< File: 2015 01 06_Draft DOSS notes.docx >>

Erin Foresman

US EPA | Environmental Scientist | SF Bay Delta C/O NMFS 650 Capitol Mall| Sacramento, CA 95814 916-930-3722|www.epa.gov/sfbaydelta

Schedule: M 7:30a - 4:00p; T - F 7:30a - 2:00p